National Aeronautics and Space Administration

Aerospace Engineer

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Aerospace Engineer

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As a research engineer, I spend most of my time conducting experiments, studying data, and developing new design tools to help build better airplanes and space vehicles. I am currently working on a new design that may eventually replace the Space Shuttle. This new space vehicle will carry crews back and forth from Earth to low-earth orbit and the International Space Station. Our design will incorporate new technologies to make the vehicle fly safer and smarter, while reducing operational costs and maintenance.

Areas of expertise:

- Aerodynamics
- Stability and Control
- Wind tunnel and flight testing
- Simulation studies

How I first became interested in this profession:

I fell in love with NASA and the space program at a very early age, even before I entered school. Ever since, I've always dreamt about working for NASA, designing new space vehicles, participating in mission operations, and some day flying to space myself.

What helped prepare me for this job:

I always loved learning, and I took every math, science, and computer course available at my school. I then studied aerospace engineering at the undergraduate and graduate levels. I learned to fly, and I also learned the importance of being accurate, organized, and to be able to communicate well with others.

My role models or inspirations:

As a child in the early 70's, I was glued to my television set watching the lunar landings. The Apollo project captured my imagination, and inspired me to work for NASA, so I now make my own contribution to space flight and exploration.

My education and training:

- B.S. in Aerospace Engineering, Syracuse University
- M.S. in Aerospace Engineering, University of Southern California

My career path:

- Six years in flight research and testing at NASA Dryden Flight Research Center •
- Six years doing wind-tunnel, simulation, and computational work at NASA Ames

What I like about my job:

My work day is never boring. I am always faced with challenging and unexpected problems to solve. I especially enjoy flying different vehicles in simulation. Overall, I find it very rewarding to know that I am contributing to the development of a new generation of space vehicles that will make space flight less expensive, more intelligent and safer for everyone.

What I don't like about my job:

At times I am faced with obstacles that hinder my progress, like inadequate computers and equipment; however, with good attitude and positive outlook, I can turn any problem into rewarding success.

My advice to anyone interested in this occupation:

Define your goals clearly, and be committed to them, even though at times the obstacles may seem too great, and your goals appear unreachable. Believe in yourself, take time to dream, to use your imagination, and to find your special talent. This will be your gift to the world.